RESOLUTION NO.  $\frac{193}{}$ 

A RESOLUTION of the City Council of the City of Kent, Washington, adopting a policy for addressing installation and maintenance of crosswalk markings throughout the City of Kent.

#### **RECITALS**

- A. The purpose of this Resolution is to establish a methodology for determining where crosswalk markings are installed and how they are to be maintained within the City of Kent.
- B. Crosswalks are features of a multimodal transportation network that provide locations for pedestrians to cross roadways. Crosswalks exist at all intersections, whether marked or unmarked, unless signs are posted to prohibit crossing. At non-intersection locations, pavement markings are necessary to establish the crosswalk. Marked crosswalks are considered traffic control devices and are subject to the guidance in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD is approved by the Federal Highway Administration as the National Standard for such devices. The MUTCD is adopted as the statewide standard for traffic control devices, through Chapter 468-95 of the Washington Administrative Code, as mandated by RCW 47.36.030.

- C. Crosswalks can be marked or unmarked. RCW 46.04.160 defines a crosswalk as "the portion of the roadway between the intersection area and a prolongation or connection of the farthest sidewalk line or in the event there are no sidewalks then between the intersection area and a line ten feet therefrom, except as modified by a marked crosswalk."
- D. RCW 47.04.010(16) defines a marked crosswalk as "any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface thereof."
- E. Pursuant to RCW 46.61.235(1), drivers must stop for pedestrians in a crosswalk regardless of whether it is marked or unmarked.
- F. According to the Federal Highway Administration, despite numerous studies, there has been no conclusive evidence to show that either marked or unmarked crosswalks are safer in locations that are not controlled by a signal or stop sign. Marked crosswalks are appropriate at some locations but other treatments (such as post-mounted pedestrian warning signs, flashing lights, supplemental pavement markings) are also necessary when used at other locations.
- G. According to the Federal Highway Administration, "crosswalks should not be installed at locations that could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices."

<sup>&</sup>lt;sup>1</sup> Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations, Final Report and Recommended Guidelines, FHWA Publication Number: HRT-04-100. September 2005.

- H. Based on the guidelines established herein, staff will compile a prioritized list of candidate locations for enhanced crossing treatments.
- I. The Downtown Subarea Action Plan emphasizes the value of the Downtown Area as a comfortable, friendly place for people to meet and enjoy themselves. To encourage a pedestrian-friendly environment, crosswalks at intersections in the Downtown Area are considered separately from crosswalks at intersections outside the Downtown Area.
- J. This Resolution provides standard guidelines consistent with state law to be considered and applied as requests for crosswalk modification are received by city staff.<sup>2</sup>
- K. The Kent City Council's Public Works Committee reviewed the text and policy amendments at its regularly-scheduled meeting on June 20, 2016, and recommended approval to the full City Council. The Public Works Committee also received an information-only presentation on April 4, 2016. Staff presented the policy recommendations to City Council at Council Workshop on April 5, 2016. Additionally, staff reached out to eight Neighborhood Councils and conducted five focus groups to gather public input.
- L. On July 19, 2016, the Kent City Council held a public hearing to consider the matter. At the close of the public hearing, the City Council voted to recommend approval of adopting a policy for addressing installation and maintenance of crosswalk markings throughout the City of Kent.

<sup>&</sup>lt;sup>2</sup> For information regarding proposed locations impacted by this Resolution, see Attachment 1.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF KENT, WASHINGTON, DOES HEREBY RESOLVE AS FOLLOWS:

### **RESOLUTION**

- **SECTION 1.** <u>Signal-Controlled Locations</u>. Crosswalks should be marked at signal-controlled intersections unless the Traffic Engineer determines a crosswalk is not appropriate for traffic flow. In that case, a "no pedestrian crossing" sign will be installed.
- **SECTION 2.** <u>Stop-Sign Controlled Locations</u>. At locations controlled by stop or yield signs, crosswalk markings should not be installed unless at least one of the following is true:
- A. The Traffic Engineer determines a marked crosswalk is needed to direct pedestrians to the proper crossing path due to traffic flow or safety concerns.
- B. The stop-sign controlled location is within the Downtown Area. Kent has designated the Downtown Area as key to economic vitality of the City. Pedestrian access to this area is especially important to encourage commerce. Stop-sign controlled locations in the Downtown Area, as defined by Council, should be marked, with the exception of intersections that currently have single-family residential character, unless those locations qualify under other sections of this policy. The stop-sign controlled location is on a school walking route pursuant to WAC 392-141-340. In such case, refer to section 5.
- **SECTION 3.** <u>Uncontrolled Locations</u>. Uncontrolled locations are pedestrian crossings not controlled by a traffic signal, stop sign or yield sign. This includes uncontrolled intersection locations as well as midblock locations. The following table will be consulted for uncontrolled locations.

Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations.\*

Roadway Type (Number of		hicle A ≤ 9,000			nicle A			hicle A 000-15	-		hicle <i>A</i>	
Travel Lanes and Median	A COURT OF STREET THE TAX		***********		8	Speed	Limit*	*		!	en ha vision es propedant han	
Type)	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h	30 mi/h	35 mi/h	40 mi/h	30 mi/h	35 mi/h	40 mi/h
Two lanes	С	С	Р	С	С	Р	С	С	N	С	Р	N
Three lanes	С	С	Р	С	Р	Р	P	Р	N	Р	N	N
Multilane (four or more lanes) with raised median	С	С	Р	С	Р	N	Р	P	N	N	N	N
Multilane (four or more lanes) without raised median	С	Р	N	Р	Р	N	N	N	N	N	N	N

<sup>\*</sup>These are general recommendations; good engineering judgment should be used in individual cases for deciding where to install marked crosswalks.

In uncontrolled locations categorized as "C," the Traffic Engineer will determine whether the location is appropriate for a marked crosswalk.

The Traffic Engineer will also determine whether the peak hourly pedestrian volume is at least 20 pedestrians per hour (or 15 or more elderly or children pedestrians). The pedestrian volume requirement shall be waived if the uncontrolled location is at an intersection within the Downtown Area with the exception of intersections that currently have single-family

<sup>\*\*</sup> Where the speed limit exceeds 40 mi/h, marked crosswalks alone should not be used at uncontrolled locations.

C = Candidate sites for marked crosswalks.

P = Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements such as post-mounted pedestrian warning signs, flashing lights, supplemental pavement markings.

N = Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalks without other pedestrian facility enhancements such as post-mounted pedestrian warning signs, flashing lights, supplemental pavement markings.

Source: This table was adapted from table 11 in the Federal Highway Administration's publication Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations, Final Report and Recommended Guidelines. FHWA Publication Number: HRT-04-100. September 2005.

residential character, unless those locations qualify under other sections of this policy.

In uncontrolled locations categorized as "P", an engineering study will be performed. The study, in accordance with the Manual on Urban Traffic Control Devices (MUTCD), should consider:

- a. Number of lanes,
- b. The presence of a median,
- c. The distance from adjacent signalized intersections,
- d. The pedestrian volumes and delays,
- e. The average daily traffic,
- f. The posted or statutory speed limit or 85th-percentile speed,
- g. Geometry of location,
- h. Possible consolidation of multiple crossing points,
- i. The availability of street lighting, and
- j. Other appropriate factors.

Additional factors that may be considered include land use, pedestrian facilities nearby, and potential traffic-calming items such as post-mounted pedestrian warning signs, flashing lights, or supplemental pavement markings. Upon conclusion of the study, the Traffic Engineer shall determine the need for a marked crosswalk in the uncontrolled location and document the decision and the reasoning.

Locations categorized as "N" shall not be marked without the appropriate traffic-calming items, to be determined by the Traffic Engineer. These items may include post-mounted pedestrian warning signs, flashing lights, supplemental pavement markings, or other devices.

**SECTION 4.** – <u>Designated School Crossing Locations</u>. Pursuant to RCW 46.61.440, designated school crossing locations have a maximum speed limit of twenty miles per hour.

Designated school crossings may be established in locations where the school district commits to providing a school crossing guard. When requested by the school district's transportation director, the Traffic Engineer will evaluate potential new designated school crossing locations with the Kent Police Department.

In accordance with the MUTCD, designated school crossing locations shall include:

- a. Advance Crossing Assembly and School Speed Limit Assembly, posted in advance of the marked crosswalk,
  - b. Marked crosswalk with School Crossing Assembly, and
- c. Signs to mark the end of the school speed zone, posted at least 300 feet after the marked crosswalk.

The Traffic Engineer will work with the school district's transportation director in cases where designated school crossing locations are no longer staffed by a school crossing guard. When necessary, school crossing signs and associated markings will be removed.

**SECTION 5.** – Locations on Walking Routes to School. The Traffic Engineer shall follow the MUTCD's guidance on crosswalk markings, such that crosswalks should be marked at all intersections on established routes to school where there is a substantial conflict between motorists, bicyclists, and student movements; where students are encouraged to cross between intersections; where students would not otherwise recognize the proper

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place to cross; or where motorists or bicyclists might not expect students to cross.

For purposes of this Resolution, established routes to school will be determined by school walk routes, pursuant to WAC 392-141-340. Areas of substantial conflict will be determined by the Traffic Engineer. Factors that may contribute to substantial conflict include vehicle volume, pedestrian volume, sight distance, vehicle speed limit, and presence of sidewalks.

The Traffic Engineer will work with the school district's transportation director when school walking routes change. The crosswalk marking will be removed if it is not justified under Section 5 of this policy.

**SECTION 6.** – <u>Severability</u>. If any one or more section, subsection, or sentence of this resolution is held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this resolution and the same shall remain in full force and effect.

**SECTION 7.** - Corrections by City Clerk. Upon approval of the city attorney, the city clerk is authorized to make necessary corrections to this resolution, including the correction of clerical errors; resolution, section, or subsection numbering; or references to other local, state, or federal laws, codes, rules, or regulations.

**SECTION 8.** – <u>Effective Date</u>. This resolution shall take effect and be in force immediately upon its passage.

PASSED at a regular open public meeting by the City Council of the City of Kent, Washington, this \_/6 th day of Quyuxt\_, 2016.

CONCURRED in by the Mayor of the City of Kent this 16th day of August, 2016.  SUZETTE COOKE, MAYOR
ATTEST:
Sue Hanson SUE HANSON, INTERIM CITY CLERK
APPROVED AS TO FORM:
TOM BRUBAKER, CITY ATTORNEY
I hereby certify that this is a true and correct copy of Resolution No.  1931 passed by the City Council of the City of Kent, Washington, 16th  August 2016.
Sue Harager SUE HANSON, INTERIM CITY CLERK

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#### **ATTACHMENT 1**

Table 1. Summary of Recommended Changes to Crosswalk Markings Citywide

Location Type	Add Crosswalk Markings	Remove Crosswalk Markings
Signal- Controlled	1	0
Stop-Sign Controlled	32	27
Uncontrolled	28	19
Established Routes to Schools	0	1
Total	61	47

## **Recommended Changes**

### Signal-Controlled Locations

There is one signal-controlled location that is recommended for marking, subject to available funding. The following table lists this location.

Table 2. Signal-Controlled Locations Proposed for Marking

Major Street	Minor Street	Leg
East Pioneer Street	Central Avenue North	S

# Stop- or Yield-Sign Controlled Locations

Public Works staff reviewed all of the existing stop- and yield-sign controlled locations within the City, (marked crosswalks within walking routes to school were evaluated separately). Twenty-seven marked crosswalks are candidates for removal. The following table lists these locations.

Table 3. Marked Crosswalks at Stop- and Yield-Sign Controlled Locations
Proposed for Removal

Major Street	Minor Street	Leg
80th Pl S (S 192nd Street)	84th Ave S	Е
80th Pl S (S 192nd Street)	84th Ave S	W
S 182nd St	72nd Ave S	W
S 184th St	East Valley Hwy (84th Ave S)	Е
S 187th St	East Valley Hwy (84th Ave S)	Е
S 196th St	66th Ave S	N
S 196th St	81st Ave S	S
S 216th St	64th Ave S	W
S 216th St	64th Ave S	Е
S 216th St	68th Ave S (West Valley Highway)	E
S 216th St	68th Ave S (West Valley Highway)	W
S 216th St	72nd Ave S	W
S 220th St	68th Ave S (West Valley Highway)	E
S 224th St	68th Ave S (West Valley Highway)	E
SE 260th St	101st Ave SE	S
SE 260th St	Driveway West of 104th Ave SE	S
SE 260th St	Top Foods Driveway	S
Southeast 248th St	116th Ave SE	N
Southeast 248th St	116th Ave SE	Е
Southeast 248th St	116th Ave SE	S
Veterans Dr (S 228th St)	54th Ave SW	N
Veterans Dr (S 228th St)	Riverview Blvd S Enter/Exit Ramp	S
Veterans Dr (S 228th St)	Riverview Blvd S Exit Ramp	N

Veterans Dr (S 228th St)	Private Rd (Driveway between Russell Rd and 54th Ave SW)	N
Veterans Dr (S 228th St)	Riverview Blvd S	Е
Veterans Dr (S 228th St)	Riverview Blvd S	W
Veterans Dr (S 228th St)	Russell Rd	N

With input from Economic and Community Development staff, Public Works staff recommends that all stop-controlled and yield-controlled locations in the Downtown Area, as designated by City Council, be marked as funding becomes available. This would require adding 32 crosswalk markings. The following table lists these locations.

Table 4. Stop-Sign and Yield-Sign Controlled Locations within the Downtown Area Proposed for Marking

Major Street	Minor Street	Leg
E George St	Central Ave N	Е
E George St	State Ave N	Е
E George St	State Ave N	W
E George St	Woodford Ave N	W
E Saar St	Central Ave S	W
E Willis St	Bridges Ave S	S
E Willis St	Railroad Ave S	N
E Willis St	Railroad Ave S	S
N Lincoln Ave	W Harrison St	E
W Temperance St	1st Ave N	W
Titus St	Kennebeck Ave S	W
Titus St	State Ave S	N
W Harrison	Washington Ave N (68th Ave S)	Ë
W Harrison St	6th Ave N	Е
W James St	1st Ave N	N
W Meeker St	S 6th Ave	N

W Meeker St	S 6th Ave	S
W Meeker St	Madison Ave	N
W Meeker St	Thompson Ave N	N
W Saar St	2nd Ave S	E
W Saar St	2nd Ave S	W
W Smith St	64th Ave S	E
W Smith St	6th Ave N	S
W Smith St	Madison Ave	S
W Smith St	Washington Ave N (68th Ave S)	E
W Smith St	Washington Ave N (68th Ave S)	W
W Willis St	1st Ave S	N
W Willis St	1st Ave S	S
Ward St	N Kennebeck Ave	W
Washington Ave N (68th Ave S)	W Sam St	E
W Harrison St	Madison Ave	Е
W Harrison St	Madison Ave	W

## Uncontrolled Locations

Public Works staff reviewed all marked crosswalks at uncontrolled locations within the City (crosswalks within walking routes to school were evaluated separately). In all, 19 marked crosswalks are candidates for removal. These locations may be considered for enhanced treatment in the future, such as post-mounted pedestrian warning signs, flashing lights, supplemental pavement markings. The following table lists these locations.

Table 5. Marked Crosswalks at Uncontrolled Locations Proposed for Removal

Major Street	Minor Street	Leg
39th Pl S	Riverview Blvd S	N
S 216th St	64th Ave S	S
S 216th St	64th Ave S	N

S 217th St	Riverview Blvd S	N
S 219th PI/S 218th PI	Riverview Blvd S	S
SE 260th St	101st Ave SE	W
Veterans Dr (S 228th St)	54th Ave SW	W
Veterans Dr (S 228th St)	Riverview Blvd S Entrance Ramp	N
Veterans Dr (S 228th St)	Riverview Blvd S	W
S 244th St	Military Rd S	N
S 248th St	Military Rd S	N
S 221st Pl	Riverview Blvd S	S
Lincoln Ave*	2nd from North	Midblock
Lincoln Ave*	3rd from North	Midblock
Lincoln Ave*	4th from North	Midblock
E Titus St*	Central Ave S	N
Willis St*	2nd Ave	W
Willis St*	2nd Ave	E
Willis St*	3rd Ave	E

<sup>\*</sup> Indicates location within the Downtown Area.

Staff also reviewed all uncontrolled intersection locations within the Downtown Area with input from Economic and Community Development staff. There are currently 28 uncontrolled locations within the Downtown Area that are recommended for marking. The following table lists these locations.

Table 6. Crosswalks at Uncontrolled Locations within the Downtown Area Proposed for Marking

Major Street	Minor Street	Leg
1st Ave N	Cole Street	W
W Cloudy St	1st Ave N	W
W Cloudy St	5th Ave N	Е
W Cloudy St	5th Ave N	S

E George St	State Ave N	N
E George St	State Ave N	S
E George St	Woodford Ave N	N
E George St	Woodford Ave N	S
W Gowe St	5 <sup>th</sup> Ave S	E
W Meeker St	6th Ave N	E
E Meeker St	N Kennebeck Ave	S
W Meeker St	Madison Ave	Е
W Meeker St	Madison Ave	W
W Saar St	1st Ave S	W
W Saar St	1st Ave S	N
W Saar St	1st Ave S	S
W Saar St	2nd Ave S	N
W Saar St	2nd Ave S	S
W Saar St	5th Ave S	Е
W Saar St	5th Ave S	N
E Saar St	Railroad Ave S	E
E Saar St	Railroad Ave S	N
E Saar St	Railroad Ave S	S
W Temperance St	1st Ave N	S
W Harrison St	Madison Ave	N
W Harrison St	Madison Ave	S
Ward St	N Kennebeck Ave	N
Ward St	N Kennebeck Ave	S

# Designated School Crossing Locations

Staff reviewed existing designated school crossing locations and identified three that no longer have a school-provided crossing guard, and one where staff recommends adding a guard. Staff will work with the school district to

determine next steps for these locations, which are listed in the following table.

Table 7. Crosswalks Recommended for Further Discussion with School Districts

Major Street	Minor Street	Leg
South James Street	64 <sup>th</sup> Avenue South	S
South James Street	64 <sup>th</sup> Avenue South	W
South 236 <sup>th</sup> Street	Lakeside Boulevard East	N
Southeast 192nd Street	120th Avenue Southeast	W

#### Established Routes to School

Public Works staff reviewed all of the marked crosswalks within established walking routes to schools. Twelve marked crosswalks would be candidates for removal under the proposed guidelines, but staff recommends that nine of these locations be maintained under a grandfather clause because they are stop-controlled and therefore within safety guidelines. The following table lists the nine locations proposed to be maintained.

Table 8. Crosswalks within Established Walking Routes to Schools Proposed to be Maintained under Grandfather Clause

Major Street	Minor Street	Leg
SE 232nd St	110th Pl SE	W
SE 232nd St	112th Ave SE	S
SE 232nd St	114th Ave SE	N .
S 236th Pl	64th Ave S	E
S 238th Pl	64th Ave S	Е
SE 260th St	140th Ave SE	W
S 261st St	42nd Ave S	W
S 262nd St	42nd Ave S	W
S 262nd St	42nd Ave S	S

The following marked crosswalk in an uncontrolled location within an established walking route to school is a candidate for removal. In making

this recommendation, staff consulted with the Federal Way School District and the District concurred.

Table 9. Marked Crosswalk within Established Walking Routes to Schools Proposed for Removal

Major Street	Minor Street	Leg	School
South 248th Street	42nd Avenue South	S	Sunnycrest Elementary

The following uncontrolled locations within established walking routes to school would not be marked under the proposed guidelines; however, they may have sufficient pedestrian volume to warrant marking. Accordingly, staff recommends pedestrian studies be conducted for these locations.

Table 10. Crosswalks within Walking Routes to Schools Proposed for Pedestrian Study

Major Street	Minor Street	Leg	School
South 232nd Place	Lakeside Blvd East	S	Neeley- O'Brien
S 240 <sup>th</sup> Street/James Street	Lakeside Blvd East	W	Neely- O'Brien

#### Prioritized List for Enhanced Treatments

The City will develop and maintain a prioritized list of potential locations for enhanced pedestrian treatments, such as flashing lights, raised crosswalks, or advanced paving markings. These features and crosswalks will be installed as funding becomes available. Input from residents and businesses will be considered in prioritizing those locations. Factors to consider may include nearby land use such as parks or multifamily housing, pedestrian volume, history of pedestrian-vehicle collisions, and other factors. The Traffic Engineer will make a final determination pursuant to the proposed guidelines.